

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A biocompatible meniscal repair device, comprising;
a biocompatible tissue repair scaffold adapted to be placed in contact with a defect in a meniscus,
wherein the scaffold comprises a dry laid nonwoven polymeric material, the dry laid nonwoven
polymeric material consists of a density in the range of about 120 mg/cc to 360 mg/cc, and
wherein the scaffold has an initial modulus of elasticity greater than about 1.5 MPa and an initial
suture pull-out strength greater than about 6 N, and wherein viable tissue is disposed on the tissue
repair scaffold, the viable tissue having viable cells capable of integrating with native tissue
adjacent to the tissue repair scaffold.
2. (Previously Presented) The repair device of claim 1, wherein the tissue repair scaffold has an
initial peak stress greater than about 2 MPa.
3. (Previously Presented) The repair device of claim 1, wherein the tissue repair scaffold has an
initial suture pull-out strength less than about 45 N.
4. (Previously Presented) The repair device of claim 1, wherein the tissue repair scaffold has an
initial modulus of elasticity less than about 40 MPa.
5. (Original) The repair device of claim 1, wherein the tissue repair scaffold has a thickness in
the range of about 0.5 mm to 1.5 mm.
6. (Original) The repair device of claim 1, wherein the tissue repair scaffold further comprises a
biocompatible foam material joined to the nonwoven polymeric material.
7. (Original) The repair device of claim 1, the nonwoven polymeric material comprises a
synthetic polymer.
8. (Original) The repair device of claim 1, wherein the tissue repair scaffold is bioabsorbable.
9. (Canceled).
10. (Original) The repair device of claim 1, wherein the nonwoven polymeric material is formed
from at least one polymer derived from monomers selected from the group consisting of

glycolide, lactide, caprolactone, trimethylene carbonate, polyvinyl alcohol, and dioxanone.

11. (Original) The repair device of claim 10, wherein the nonwoven polymeric material comprises polydioxanone.
12. (Original) The repair device of claim 10, wherein the nonwoven polymeric material comprises a copolymer of polyglycolic acid and polylactic acid.
13. (Original) The repair device of claim 1, further comprising at least one bioactive substance effective to stimulate cell growth.
14. (Original) The repair device of claim 13, wherein the bioactive substance is selected from the group consisting of a platelet rich plasma, cartilage-derived morphogenic proteins, recombinant human growth factors, and combinations thereof.
15. (Canceled).
16. (Original) The repair device of claim 1, wherein the nonwoven polymeric material comprises crimped, synthetic polymer fibers.
17. (Original) The repair device of claim 1, wherein the nonwoven polymeric material is heat-set.
18. (Original) The repair device of claim 1, wherein the fiber orientation of the nonwoven polymeric material is isotropic.
19. (Previously Presented) A biocompatible meniscal repair device, comprising:
a biocompatible tissue repair scaffold adapted to be placed in contact with a defect in a meniscus, the scaffold including:
(a) a dry laid nonwoven polymeric material consisting of a density in the range of about 120 mg/cc to 360 mg/cc;
(b) a biocompatible foam; and
(c) viable tissue disposed on the tissue repair scaffold, the viable tissue containing viable cells capable of integrating with native tissue adjacent to the tissue repair scaffold,

wherein, the scaffold provides increased suture pull-out strength and has an initial modulus of elasticity in the range of about 1.5 MPa to 40 MPa.

20. (Original) The repair device of claim 19, wherein the tissue repair scaffold has a peak stress in the range of about 2 MPa to 14 MPa.
21. (Original) The repair device of claim 19, wherein the tissue repair scaffold has a suture pull-out strength in the range of about 6 N to 45 N.
22. (Cancelled).
23. (Original) The repair device of claim 19, wherein the tissue repair scaffold has a thickness in the range of about 0.5 mm to 1.5 mm.
24. (Original) The repair device of claim 19, the nonwoven polymeric material comprises a synthetic polymer.
25. (Original) The repair device of claim 19, wherein the tissue repair scaffold is bioabsorbable.
26. (Original) The repair device of claim 19, further comprising at least one bioactive substance effective to stimulate cell growth.
27. (Original) The repair device of claim 26, wherein the bioactive substance is selected from the group consisting of a platelet rich plasma, cartilage-derived morphogenic proteins, recombinant human growth factors, and combinations thereof.
28. (Cancelled).
29. (Cancelled).
30. (Cancelled).
31. (Cancelled).

32. (Previously Presented) The repair device of claim 1, wherein the viable tissue disposed on the tissue repair scaffold is selected from the group consisting of minced tissue, sliced tissue, and a tissue strip.
33. (Previously Presented) The repair device of claim 19, wherein the viable tissue disposed on the tissue repair scaffold is selected from the group consisting of minced tissue, sliced tissue, and a tissue strip.
34. (Cancelled).
35. (New) The repair device of claim 1, wherein the scaffold has a modulus of elasticity greater than 1.5 MPA.
36. (New) The repair device of claim 1, wherein the scaffold has a modulus of elasticity of about 1.5 MPA.
37. (New) The repair device of claim 35, wherein the tissue repair scaffold has a suture pull-out strength greater than 6 N.
38. (New) The repair device of claim 35, wherein the tissue repair scaffold has a suture pull-out strength of about 6 N.
39. (New) The repair device of claim 36, wherein the tissue repair scaffold has a suture pull-out strength greater than 6 N.
40. (New) The repair device of claim 36, wherein the tissue repair scaffold has a suture pull-out strength of about 6 N.